CURRENT PRICES OF ENGINEERING MATERIALS

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PRICE CHANGES AND THE BUSINESS OUTLOOK.

All lines of trade have rested during the month. Quotations in the material markets have neither advanced nor declined; with only a few exceptions. In the iron and steel industry production is at a tremendous rate with, apparently, no let up in prospect; but there is no acceleration. The principal demand is in the lighter lines and premiums are paid for prompt deliveries of sheets.

Metals have fluctuated within narrow limits; the only important development being a poor statistical position in tin.

Another advance in linseed oil carried quotations to new high levels; turpentine likewise advanced about ten cents a gallon and paints are sympathetically firm. Brick at New York are about $1 a thousand higher than last month.

In the commodity markets sharp declines have been recorded. The cotton speculators, who advanced future prices to such a level that spinners in Europe and at home were refusing to buy, were forced to unload and to-day's prices, although high, are fully two cents lower than a month ago. Grains have likewise declined.

The most notable price changes have been made in the stock markets where quotations are from ten to twenty per cent. below the high figures of the first of the year. Many stocks are only a little higher than a year ago. This, in itself, is of little interest to the prudent business man, but with the drop in prices interest rates have declined and bond issues long delayed are coming out. This may mean a furtherance of important railroad projects that have been postponed.

Several electrification and development schemes are only waiting a favorable opportunity to raise funds.

The labor situation, as far as the trainmen's strike is concerned, shows a distinct improvement. Both sides are squarely meeting the issue. The bituminous coal miners are uneasy, however, and in the building trades the outlook is not promising.

The agitation regarding the high cost of living has continued, but there are indications that this will be short lived.

Congestion on the railroads, particularly in the middle west, is growing worse. This has been caused by the heavy snows, coupled with a large freight movement. The operating efficiency of the country's transportation lines, however, greatly increased. The latest report of the earnings of the Pennsylvania system shows this to be particularly marked in that instance and others could be mentioned.

Some large work has come out recently; this includes a $10,000,000 cut-off around Milwaukee by the Northwestern. Contracts are pending for about $4,000,000 worth of equipment and 50 miles of second track by the Norfolk & Western. The Union Pacific has awarded contracts for about $5,000,000 of new lines in Colorado. Several other double tracking schemes are in prospect. Extensive dock work on the Great Lakes, Galveston and Philadelphia is contemplated. New highways in New York state will call for over $3,000,000.

Plans are being prepared for a $3,500,000 post-office in Washington. A state institution at Stillwater, Minn., is to be built. The Grand Trunk has extensive improvement under way in Montreal.

The floods in Paris have little interest, in a business way, for American contractors and the effects in this country will not be marked like the San Francisco disaster.

LABOR.

The supply of ordinary laborers exceeds the demand and it is possible to get outside labor for $1.50 per day and foremen at $2.25 a day. In the skilled branches the inquiry is just as marked as ever. At the moment there appears to be a pressing demand for miners; especially skilled gangs. There are more places to fill than men to work. Iron and brass founders need pattern makers and are unable to get them at 35 cts. an hour. Iron molders likewise are scarce and the same is true of wood workers.

Strikes are imminent in many parts of the country. The bituminous coal miners are getting their demands in shape to present to the operators and special unrest is noted among mechanics in the building trades in many cities. In New York the disposition seems to be to allow the steamfitters to fight out their own grievances.

In the railroad world a concilitory spirit is observed. Several railroads have made voluntary advances and others are meeting their workmen half way. The prospect of a general railroad strike is less likely than a month ago.

Immigration during January fell off as only 27,907 steerage passengers arrived last month compared with 29,651 the corresponding month last year.

CEMENT, LIME AND BRICK.

PORTLAND CEMENT.—A little more business is moving than a month ago, still trade is dull. It is said that more Portland cement is being used in this city, in the cold weather, than usual. The largest work, in this vicinity, such as the Catskill Aqueduct, the Barge Canal and the Brooklyn Subway, is calling for a very large amount of cement, but most of these contracts are made to extend over a period of years and the probable monthly deliveries can be figured on in advance.

The market is firm and the largest makers are taking steps to protect themselves against any marked increase in business by building considerable additions to their plants. These are placed so that a favorable freight rate to the important consuming centers can be secured and in this way the manufacturers are taking a long look ahead. Prices are without change and for delivery within lighterage limits New York $1.43 per bbl. is quoted. In Philadelphia $1.42 is asked and in Boston, $1.52.

Imported cement is unchanged in price, Alsen's at $2.42 and Dyckerhof's at $2.43.

NATURAL CEMENT.—The demand is proportionately less than in the Portland line. The nominal price continues, 80 cts. per bbl. delivered along side of dock New York.

LIME.—The demand is poor with almost no inquiry for the cheaper brands. For large lots delivered New York City prices are as follows: State common, per bbl., 75 cts.; Rockland-Rockport common, 92 cts.; Rockland-Rockport special, 320 lbs., $1.37; select finish, 320-lb., net, $1.60; New Milford, $1.30. Hydrated lime for brick work is $6.50 per ton; for finishing, $9 per ton. These prices are for carload lots.

Adamant wall plaster is $6 per net ton delivered at the work.

PLASTER BLOCKS.—For large lots prices are as follows:

Thickness.	Weight per sq. ft. lbs.	Price per sq. ft. cts.
2-in.	8	6
3-in.	8½	6¼
4-in.	11	7¼

These blocks are made 32-in. long by 13⅓-in. wide containing 3 sq. ft. of surface. The 2-in. blocks are solid but the others are hollow.

Plaster boards ⅜-in. thick are 16 cts. per sq. yd.

BRICK.—The demand for brick is good. Building in certain sections of New York is going forward rapidly and, owing to unfavorable weather, the Hudson River brick plants are not making any. Considerable brick is in the harbor which is held for higher prices. The price to-day is $6.75 to $7 per M. an advance of $1 since the last report. Some dealers who are holding out declare there will be a scarcity later on and then they will easily obtain $7.50 which they are asking.

Seconds and hard brick are higher at $5.25 to $5.75 per M.

Boston prices are $7.50 per M.

White enameled brick are unchanged at $60 per M. for the American size (8¾ × 2¼-in. enameled surface by 4¼-in. bed) and $80 per M. for the English size (9 × 3-in. enameled surfaced by 4¼-in. bed). These prices include delivering at the work in New York City or f. o. b. cars in the Eastern and Middle States.

STONE.

HUDSON RIVER BLUE.—Business is practically at a standstill, that is, as far as flagging and curbing is concerned, but some building stone is being used; principally in a cheaper form of window sills. Some granite and Ohio flagging is coming into this market, making competition with blue stone particularly keen. It is mostly used, however, for large surfaces.

Prices are without change from last month and for delivery, either along side of dock or f. o. b. cars, New York prices are as follows:

Flagging, 6 cts. per sq. ft. per in. of thickness; flagging 3-in. thick that will pass New York specifications is 18 to 19 cts. per sq. ft. Some 3-in. stone is sold at 17 cts. Wherever 2-in. stone will answer it can be had at 12 cts. New York with freight added to destination.

Sewer bottoms 5 ft. sq. and 3-in. thick are 25 cts. per sq. ft. Curbing 5 × 16-in. is 35 cts., and 5 × 20-in. is 47 cts. per lin. ft. Belgian bridge, 6 × 24-in. × 5-in. thick is 60 cts. and 6-in. thick is 72 cts. per lin. ft.

Promiscuous shapes of building and foundation stone sell at 70 cts and 74 cts. per cu. ft.; dressed stone is 82 ct. to 86 cts. per cu. ft.

GRANITE.—A little more animation is observed than a month ago, chiefly in the building line. For permiscuous shapes of Maine granite 40 cts. per cu. ft. is asked, dressed granite is 80 cts. to $1 per cu. ft.

CRUSHED STONE, SAND AND GRAVEL.

CRUSHED STONE.—The demand is better than many people expected, considering the unfavorable weather. Prices are without change and for full cargo lots of approximately 500 yds., delivered along side of dock, quotations are as follows: 1½-in., 90 cts.; ¾-in., $1.05; screenings, 85 cts. These prices are per cu. yd. for trap rock. Limestone is obtainable at about 5 cts. a yd. cheaper.

SAND.—The demand continues good, clean sand being obtainable at 30 cts. and Cow Bay at 35 cts. per cu. yd. delivered along side of dock.

White quartz sand is 58 to 62 cts. per cu. yd. and white quartz grit is 60 to 70 cts. per cu. yd.

GRAVEL.—Prices are practically unchanged from last month, washed gravel being quoted at 65 to 70 cts. per cu. yd. along side of dock New York. Pebbles, or roofing gravel, is $1.25 per net ton and white quartz roofing gravel is $1.25 to $1.35 per net ton.

IRON AND STEEL.

PIG IRON.—Price changes during the month were unimportant; a reduction of 25 cts. a ton in Cincinnati being the only one worthy of note. Silicon irons, however, are firmer.

The buying has been fair and it is possible that 500,000 tons may be contracted for as considerable iron is being purchased for second half delivery. When it is recalled that only 200,000 tons were sold in January last year, the improvement is evident. In December, too, transactions were only 175,000 tons, but the November tonnage ran up to 500,000 tons. During the whole first quarter of 1909 the total was less than 400,000 tons.

One of the important sales was 10,000 tons to the General Electric Co. for its Schenectady plant. This same interest is reported to be figuring on about 50,000 tons more.

Steel making iron is in good inquiry, some large sales of basic having been made in Eastern Pennsylvania.

A feature of the present market is the inquiry from small consumers. The local foundries all over the country seem to be unusually busy. Several reports have been current in reference to sales below $14, Birmingham. While some scattered lots may have sold at concessions of 25 cts. a ton, no large lots were contracted for below that figure.

The following quotations are for lots of 100 gross tons and over f. o. b. cars at the points named: Foundry iron in Cincinnati, southern No. 1, $17.75; southern No. 2, $17.25; southern No. 4, $16.50. In Philadelphia, northern foundry No. 2X is sold at $19. In New York northern foundry No. 2 plain is held at $18.50 to $18.75. In Chicago northern foundry No. 2 is sold at $19 to $19.50; southern No. 2 at $18.50. In Pittsburg Bessemer is held at $20 and basic at $18. Southern No. 2 in Birmingham is $14.

STRUCTRUAL SHAPES.—No important contracts have been placed recently, but the leading structural concerns are well filled up for the first half of this year, and in some cases are refusing to bid on some of the work coming out, stating that it is being taken at prices that do not allow a profit. The mills are making a little better deliveries, but are not yet furnishing material as fast as consumers would like to have it.

"The Iron Age" says that Chicago fabricators are figuring on new work, in adjacent territory, amounting to 200,000 tons. The Quebec bridge, 60,000 tons, may not be let for two or three months. This is the most important new work in sight. Several bridges calling for less than 5,000 tons are contemplated. Among these may be mentioned: one of 2,500 tons for the N. Y. C. & H. R. R. R.; a small draw span for the Great Northern; a small one for the P. & R. Ry., and another for the N. Y., N. H. & H. R. R. An Ohio River bridge, calling for 8,000 tons, is being figured on.

Several shops and small buildings call for tonnages amounting to 1,000 to 2,000 tons each; the most important being 2,600 tons for the Memphis Cotton Exchange, taken by the Virginia Bridge Co.

Pacific Coast business is being taken by foreign mills in spite of concessions in the way of freight rates.

The following prices are quoted in cts. per lb., f. o. b. Pittsburg: I-beams and channels, 3 to 15-in., 1.55; over 15-in., 1.65; H-beams, over 8-in., 1.75; angles, 3 to 6-in., 1.60; over 6-in., 1.65; zees, over 3-in., 1.60; deck beams and bulb angles, 1.80; hand rail tees, 2.80.

Chicago store prices are as follows in cts. per lb.: Angles 3 to 6-in., 2 to 2.10; over 6-in., 2.10 to 2.20. The base on beams and channels is 2.

STEEL RAILS.—Rail business has not been as active as last year, but a goodly amount was disposed of. Some of the orders booked include: 14,000 tons for the M. K. & T. R. R.; 8,500 tons of Bessemer rails for the Harriman lines. An order for the B. & O. is still to be placed.

The quality of rails is exciting some interest and "The Iron Age" comments on the situation as follows:

"A notable feature of the rail trade this winter is that there is less complaint of breakage than in severe winters a few years ago. At that time the railroads had become very precise in their specifications as to sections and the methods to be followed by the mills. In many cases the mill men protested against poorly balanced rails, which they were required to roll, but the railroad officials insisted upon having their own way. In the last two or three years, however, they have been more than willing to accept advice from the experts of the mills, with the result that they are getting better rails, and nearly every breakage that occurs can be traced to bad wheels, which create a greater strain than the rail was made to carry. Railroad men are becoming more and more interested in steel refined by the new electric furnace at the South (Chicago) Works.

Small lots, carloads, are 50 cts. a ton higher than the following prices, which are for 500-ton lots and over f. o. b. Pittsburg: Standard sections, 70 to 100-lb., $28; 40 and 45-lb., $27; 30 and 35-lb. $27.50 to $28.50; 20 and 25-lb., $27.75 to $28.25; 12 and 14-lb., $29; 8 and 10-lb., $32. Relaying rails can be had at $22 to $26, according to delivery and quality.

TRACK SUPPLIES.—Only a small volume of business was contracted for during January, but in view of the large rail orders there is no doubt that business in this line will be excellent later in the year. Prices are unchanged. Standard railway spikes, 4¼ × 9/16-in. and larger, are quoted at $1.80 to $1.85. Boat spikes are $1.80 base. These prices are for carload lots and larger f. o. b. mill, 10 cts. per keg advance being charged for small lots. Track bolts with square nuts are held at 2.30 to 2.50 cts. per lb., and angle bars 1.50 to 1.55 cts. per lb. in Chicago and Pittsburg.

PLATES.—Business is just as active as a month ago. The demand comes from all parts of the country. Chicago reports an inquiry in excess of 100,000 tons for car material; Pittsburg reports are to the effect that the car builders have ordered a large amount of material and now there are inquiries in the market for several thousand steel cars and steel under frames. In New York a contract involving over 5,000 tons of 7/16 and ½-in. plate, for the Ashokan contract, was let.

Two large battleships are to be constructed for the Argentine Republic. One will be laid down at Quincy, Mass., and the other at Cambria, N. J. Some 40,000 tons of plates and shapes will be required.

Deliveries are slow and there is more work in sight than the makers can take care of in six months.

Prices are unchanged and for mill shipments are quoted as follows per lb.: ¾-in. thick up to 100 in. wide, 1.55 to 1.60 cts.; ¼ to ⅜-in., 1.65 to 1.70 cts. Under ⅜-in. and heavier than No. 8 gage, 1.70 to 1.75 cts. No. 8 and No. 9, 1.80 to 1.85 cts. Store prices in Chicago are 2 cts., base.

STEEL CASTINGS.—The price is largely determined by the size of the order and the pattern. Open hearth castings weighing from 100 to 500 lbs. are obtainable at 3.6 to 5 cts. per lb. For crucible castings weighing within the above limits, 7¾ to 9 cts. per lb. is asked.

PILING SHEET STEEL.—The price is unchanged but very firm, but it is easier to obtain this material than standard structural shapes. Prices are 1.60 to 1.70 cts. per lb. f. o. b. Pittsburg. For an especially large order these figures might be slightly shaded.

CASTINGS, GREY IRON.—Manhole covers and other simple heavy castings can be had at 1.5 to 2 cts. per lb. Columns and more intricate patterns are held at 2 to 2.5 cts. per lb.

Building castings are sold at 2 cts. per lb. on the Puget Sound; in Spokane they are sold at 2.75 cts. General machinery castings are sold at 3 to 3.75 cts. per lb. on the Pacific coast.

The following figures give the estimated cost of building castings, columns and column footings per net ton:

Pig iron, 0.6 ton at $20	$12.00
Scrap steel, 0.4 ton at $15	6.00
Coke, ½ ton, at $6	3.00
Labor, $5 per ton	5.00
Fixed charges	12.00
Total	$36.00

CAST IRON PIPE.—Business is light except in the South, where there are several fair-sized orders. The season is a little too early to expect spring business, but there are several inquiries in the market for fair amounts. The city of Chicago, for example, is expected to be in the market this month for about 5,700 tons.

Prices of water pipe are unchanged from last month, per net ton f. o. b. cars at foundry, as follows: Birmingham, Ala., 4 to 6-in., $26; 8 to 12-in., $25; over 12-in., $24. In Chicago, 4-in., $28.50; 6 to 12-in., $27.50; 16-in. and larger, $26.50. In New York, 6-in. is quoted at $25.50 to $26. Gas pipe is held $1 per ton higher in all markets. Specials are held at $50 to $60 per net ton.

FREIGHT RATES.—The freight rates, on finished steel products, from the Pittsburg district, including plates, structural shapes, merchant steel and iron bars, pipe, fittings, plain and galvanized wire, nails, rivets, spikes and bolts (in kegs), black sheets (except planished), chain, etc., are as follows, in cts. per 100 lbs.: Albany, 18; Bucalo, 11; Boston, 18; Baltimore, 14½; Canandaigua,

13½; Cleveland, 10; Columbus, 12; Cincinnati, 15; Chicago, 18; Harrisburg, 14½; Louisville, 18; New York, 16; Norfolk, 20; Philadelphia, 15; Rochester, 11½; Richmond, 20; Scranton, 15; St. Louis, 23; Washington, 14½.

WIRE ROPE.—Trade is rather light. Prices are unchanged at the following discounts from list: Galvanized, 42½ and 2½%; plain, 50 and 2½%. In the table the net prices, per ft., of plain well rope of Swedish iron are given. The prices of galvanized are unchanged from those printed in the issue of Jan. 6.

Diameter in ins.	Cts. per ft. Swedish Iron 7 wire to strand.	19 wire to strand.
½	3.25	4.
⅝	5.	6.
¾	7.	8.
1	11.5	13.
1¼	18.	20.
1½	25.5	28.5
1¾	..	40.
2	..	46.
2¼	..	58.5
2½	..	70.
2¾	..	85.

RIVETS.—Coupled with the large demand for plates there is an excellent inquiry for rivets. Prices, f. o. b. mill, are unchanged from last month as follows: Structural rivets, ¾ in. and larger, 2.15 cts., base; cone head boiler, rivets, ¾-in. and larger 2.25 cts., base; ⅝-in. and 11-16-in. take an advance of 15 cts., and ½-in. and 9-16-in. take an advance of 50 cts.; in lengths shorter than 1-in., also take an advance of 50 cts. The above prices are absolutely minimum on contracts for large lots, makers charging the usual advances of $2 to $3 a ton to the small trade.

ROOFING, CORRUGATED. — Prices are firm; a scarcity of material is noted at the mills and in the principal jobbing centers. Quotations are unchanged from last month and for 100 sq. ft. of roof surface are as follows: Carloads, Pittsburg, No. 28 painted, $1.70; No. 28 galvanized, $3. From store, New York, No. 24, painted, $3.85; galvanized, $4.80; No. 26, painted, $2.95; galvanized, $4; No. 28, painted, $2.60; galvanized, $3.75.

SHEETS.—The leading manufacturer is practically out of the market as far as new business is concerned. Some of the smaller mills are asking an advance of $1 to $2 over the regular price. Deliveries are 8 to 10 weeks behind specifications. Mill prices for carload lots are unchanged from last month, as follows:

	Cts. per lb. Black.	Galvanized.
Nos. 3 to 8	1.70	....
Nos. 9 and 10	1.75	....
Nos. 11 and 12	1.80	....
Nos. 13 and 14	1.85	2.50
Nos. 15 and 16	1.95	2.60
Nos. 17 to 21	2.20	2.75
Nos. 22 and 24	2.25	2.90
Nos. 25 and 26	2.30	3.10
No. 27	2.35	3.30
No. 28	2.40	3.50

Store prices Chicago are as follows:

	Cts. per lb. Black.	Galvanized.
No. 10	2.30	3.25
No. 12	2.35	
No. 14	2.40	
No. 16	2.50	3.35
Nos. 18 and 20	2.85	3.40
Nos. 22 and 24	2.90	3.55
No. 26	2.95	3.70
No. 27	3.00	3.95
No. 28	3.10	4.15
No. 30	3.30	4.55

NAILS.—The base prices at mill Pittsburg, are as follows: Carloads to jobbers, $1.85; to retailers, $1.90; less than carloads to jobbers, $1.90; to retailers, $2. From jobber's store, New York, $2.10 is quoted. Cut nails are $1.85 base, Pittsburg, and $2.10 base, from store New York. All these prices are for kegs of 100 lbs.

WIRE.—The base prices, to retailers f. o. b. Pittsburg, are as follows: Carloads, annealed, $1.70; galvanized, $2. Less than carloads, annealed, $1.90; galvanized, $2.10.

Barb wire painted is $1.95 for carloads, and $2 for smaller quantities; galvanized is $2.20 for carloads and $2.30 for small lots.

Staples are $2.43, Chicago, to retailers in less than carload lots. All of these prices are per 100 lbs.

MERCHANT PIPE.—The new list on merchant pipe, with revised discounts, constitutes an advance. New business is rather light, although some orders for large pipe are in sight. The Youngstown Sheet & Tube Co. expects to have its new 20-in. pipe mill in operation by March 1.

The new discounts, for mill shipments of carload lots or over, are as follows: Black, ¾ to 6 ins., 78%; 7 to 12 ins., 72%; galvanized, ¾ to 6 ins., 68%; 7 to 12 ins., 57%.

The net prices in the following table are computed at these discounts:

	Steel Pipe in Cts., per ft., f. o. b. Mill. Black.	Galvanized.
¾-inch	2.53	3.68
1-inch	3.63	5.28
1¼-inch	4.95	7.20
1½-inch	5.94	8.64
2-inch	7.92	11.52
2½-inch	12.67	18.30
3-inch	16.61	24.16
4-inch	23.76	34.56
5-inch	31.90	46.30
6-inch	41.36	60.16
7-inch	65.80	101.05
8-inch	70.00	107.50
9-inch	95.20	146.20
10-inch	112.00	172.00
11-inch	126.00	193.50
12-inch	137.20	210.70

SWEDISH STEEL.—The strike in Sweden is holding up deliveries and for many sizes there is an urgent inquiry.

Flat bars are sold at 6 cts. per lb. base from store. The sizes in most common use are either sold at the base price or 1 ct. above.

Drill steel, either round, hexagonal or octagon, is 6 cts. per lb. for all sizes ⅝ to 2 ins. For sizes 2⅛ to 3 ins. 7 cts. is quoted and 3⅛ to 4 ins. is 7½ cts.

Hollow drill rod is held at 12½ to 15 cts. for the imported. The American makers of hollow drill steel do not make any of it longer than 55 ins., but the prices for these short lengths are about the same as those quoted for imported material.

Anvils of Swedish steel are held at 9 to 9½ cts. per lb. They weigh from 80 to 600 lbs.

BAR IRON AND STEEL.—A scarcity of cold rolled material is noted and there is a shortage in many sizes. Prices for small lots from store New York are as follows:

Refined iron:

	Cts. per lb.
1 to 1⅞-in. round and square	2.00
1⅛ to 4 in. × ⅝ to 1 in.	2.20
1½ to 4 in. × ¼ to 5-16	2.20
Rods—⅜ and 11-16 round & square	2.20
Angles:	
3 in. × ¼ in. and larger	2.25
3 in. × 3-16 in. and ⅛ in.	2.50
1¼ to 2½ in. × ¼ in.	2.35
1¼ to 2¾ in. × 3-16 in. & thicker	2.25
1 to 1¼ in. × 3-16 in.	2.35
1 to 1¼ × ⅛ in.	2.45
⅞ × ⅛ in.	2.55
¾ × ⅛ in.	2.65
⅝ × ⅛ in.	3.70
½ × 3-32 in.	4.50
Tees:	
1 in.	2.80
1¼ in.	2.60
1½ × 2½ × ¼ in.	2.30
1½ to 2½ × 3-16 in.	2.50
3 in. and larger	2.30
Beams	2.25
Channels, 3 in. and larger	2.25
Bands—1½ to 6 × 3-16 to No. 8	2.45
Norway bars	3.50
Bessemer machinery, Steel	2.00
Cast steel, base price	7.00
Special cast steel, base price	14.00 to 15.00

SWITCH POINTS.—Prices are unchanged from last month. The following prices are named f. o. b. mill for switch points in lots of ten or more pair: For 60-lb. rail, 10-ft. points, $16.25; 15-ft. points, $22.50; for 70-lb. rail, 10-ft. points, $18.00; 15-ft. points, $25; for 80-lb. rail, 10-ft. points, $25.50; 15-ft. points, $27.75; for 90-lb. rail, 15-ft. points, $30.50; for 100-lb. rail, $33.50. All of the above are furnished with three rods, except the 10-ft. points for 60 and 70-lb. rail, which have only two.

FROGS.—For mill shipments, of ten or more, prices are as follows: Bolted frogs No. 7, for 60-lb. rail, $15; for 70-lb. rail, $16.50; for 80-lb. rail, $18; No. 8 frogs for 90-lb. rail, $21; for 100-lb. rail, $23. Plate frogs No. 7, riveted to ⅝-in. plate for 60-lb. rail, $18; for 70-lb. rail, $20; for 80-lb. rail, $21.50. No. 8 frogs bolted to a ¾-in. plate for 90-lb. rail are $25.50 for 100-lb. rail, $27.50.

SPIRAL RIVETED PIPE.—Prices are unchanged from last month. The prices given below are f. o. b factory, freight equalized, with New York City being figured at a discount of 50 and 10 and 10% from list. They are for orders amounting to about $250. For large orders, of several carloads, prices are from 12½% to 20% cheaper.

Diameter in ins.	*Thickness of Birmingham wire gage.	Price per 100 ft. With bolted joints complete. Plain.	Asphalted.	Galvanized.
3	20	$12.80	$14.21	$20.70
4	18	19.76	21.48	30.74
5	18	23.49	25.70	37.14
6	16	33.05	35.76	49.73
7	16	37.58	40.76	56.82
8	16	43.17	46.80	65.00
9	16	50.06	54.10	74.22
10	14	66.42	71.08	96.15
11	14	71.20	76.57	102.24
12	14	83.75	89.15	118.32
13	14	89.67	96.55	127.98
14	14	99.14	105.51	138.85
15	14	108.05	114.89	151.92
16	14	117.53	124.82	166.58
18	12	167.43	175.95	226.44
20	12	183.79	193.30	248.89
22	12	200.48	210.64	269.21
24	12	219.92	231.07	293.99
26	10	280.26	292.41	370.78
28	10	301.32	314.89	395.37
30	10	324.81	339.15	430.64

*Made in both lighter and heavier gages at corresponding differences in price.

LAG SCREWS.—The price of lag and coach screws is unchanged from last month. They sold at a discount of 75 and 10% from list. Net prices are as follows:

	Price per 100 ½-inch.	¾-inch.	1-inch.
3½-inch	$1.17	$2.40	$5.00
4-inch	1.25	2.55	5.25
4½-inch	1.33	2.70	5.50
5-inch	1.40	2.85	5.80
6-inch	1.58	3.20	6.40
7-inch	1.73	3.50	7.00
8-inch	1.82	3.85	7.60
9-inch	2.05	4.10	8.20
10-inch	2.25	4.45	8.75
11-inch	2.40	4.70	9.30
12-inch	2.60	5.00	9.90

BOLTS.—The price of common carriage bolts to the retail trade and larger consumers is 70 and 7½% discount from list on bolts ⅝ × 6 ins., and smaller. The lowest price is 65 and 5% discount for larger and longer bolts. Net prices are as follows:

Length in inches.	Diameter in inches—Net price per 100 ⅝	¾	⅞
4	$0.74	$1.22	$2.86
5	0.83	1.36	3.15
6	0.92	1.52	3.50
7	1.22	1.65	3.75
8	1.34	1.80	4.25
9	1.45	1.95	4.50
10	1.55	2.20	4.75
12	1.75	2.40	5.25
14	1.90	2.70	5.90
15	2.05	2.85	6.25
18	2.40	3.25	7.20
20	2.60	3.50	7.75

OLD MATERIAL.—The eastern Pennsylvania rolling mills early in the month refused to accept material. This caused an accumulation and prices fell. Shortly afterwards the heavy snow seriously interfered with the collection of supplies and the embargoes were raised but prices are still 50 cts. a ton less than a month ago. This applies particularly to steel scrap. Foundry stock is dull and unchanged.

The demand is fair but the supply is fully equal to it.

Prices for straight carloads, of one grade, are as follows:

	Per gross ton— New York.	Chicago.	Cleveland.	St. Louis.
Old steel rails (under 6 ft.)	$16.00 to $16.50	$17.00 to $17.75	$17.00 to $17.50	$16.50 to $17.00
Old steel boiler plate	....	....	14.00 to 14.50	....
Maleable iron, light	14.00 to 14.50	....	15.00 to 15.50	....
Heavy steel	14.75 to 15.25	15.50 to 16.00	16.00 to 16.50	15.50 to 16.00
	Per net ton—			
R. R. wrought	17.50 to 18.00	13.75 to 15.25	16.00 to 16.50	13.50 to 15.00
Pipes and flues	13.50 to 14.00	11.25 to 11.75	12.00 to 12.50	11.75 to 12.00
Stove plate	11.50 to 12.00	11.50 to 12.50	12.00 to 12.50	11.50 to 12.50
Machinery cast	15.00 to 15.50	15.00 to 15.50	15.00 to 15.50	14.00 to 14.50
Angle bars, steel	....	15.25 to 15.75	....	15.50 to 16.00

Curved sheets are held at an advance of $1 per 100 sq. ft. over flat.

For a desirable order prices might be shaded about 10%.

TRIANGULAR MESH.—The market is unchanged from our last report. For triangular mesh concrete reinforcement quotations are as follows:

Style No.	Price per 100 sq. ft. Cross sec. area per ft. width.	Carload lots.	Smaller quantities.
4	.012	$1.03	$1.25
5	.077	.82	.99
6	.058	.65	.78
7	.041	.50	.61
23	.170	1.73	2.08
24	.142	1.48	1.80
25	.124	1.32	1.60
26	.110	1.20	1.45
27	.083	.98	1.19
28	.066	.81	.98
29	.049	.67	.81
31	.261	2.55	3.08
32	.225	2.20	2.67
33	.196	1.96	2.38
34	.146	1.51	1.82
35	.109	1.20	1.45

REINFORCING MATERIAL.

BARS, CONCRETE REINFORCING.—The mills are not catching up on back orders of bars to any extent and there is considerable complaint from consumers. This is felt more by implement makers than engineering interests, but the scarcity will be marked unless the congestion is shortly removed. Quite a scarcity exists in cold-rolled bars. The inside base price is 1.5 cts., Pittsburg, but it is more a question of getting deliveries than price, just at present.

High carbon bars made from scrap and twisted while hot are sometimes cheaper than cold twisted bars. This fact should be taken into consideration in connection with the accompanying prices.

For carload shipments of round or square bars from mills in the Pittsburg District the following prices are ruling:

	Cts. per lb. Plain.	*Deformed.
¾-inch and larger	1.50 to 1.60	1.55 to 1.65
⅝-inch	1.55 to 1.65	1.60 to 1.70
½-inch	1.60 to 1.70	1.65 to 1.75
⅜-inch	1.75 to 1.85	1.80 to 1.90
¼-inch	2.00 to 2.10	2.05 to 2.15

Bars from stock Pittsburg are usually cut to the required length without extra charge. Prices are as follows:

	Cts. per lb. Plain.	*Deformed.
¾-inch and larger	1.70 to 1.80	1.80 to 1.90
⅝-inch	1.75 to 1.85	1.85 to 1.95
½-inch	1.80 to 1.90	1.90 to 2.00
⅜-inch	1.95 to 2.05	2.05 to 2.15
¼-inch	2.20 to 2.30	2.30 to 2.40

*The price of deformed bars varies according to the shape and some are held much higher than these prices.

Twisted bars are held at an advance of 10 to 25 cts. over plain bars.

The base price on plain bars from store, Chicago, is 2 to 2.10 cts.

EXPANDED LATH.—Prices are unchanged but firm, due to the scarcity of sheets. Standard metal lath, however is sold at the following prices f. o. b. mill central Ohio:

Carload Lots.—Price in cts. per sq. yd.

Gage.	Weight per sq. yd.	Black.	Painted.	Galvanized.
27	2¼ lbs.	11½	12	16½
26	2½ lbs.	12½	13	19½
25	3 lbs.	13½	14	20½
24	3.4 lbs.	14	14½	21

Small Lots from Store.—Price in cts. per sq. yd.

Gage.	Black.	Painted.	Galvanized.
27	13½	14	20½
26	14½	15	21½
25	15½	16	22½
24	16	16½	23

This lath is packed 9 sheets to the bundle.

DIAMOND LATH FROM STORE.

Designation	Gage.	Weight per sq. yd.	Price per sq yd. Black, cts.
A	24	4 lbs.	20
A Special	24	4 lbs.	18
B	27	2.9 lbs.	16½
B Special	27	2.9 lbs.	15
B B	27	2.83 lbs.	14
Square Twist	24	4 lbs.	20
Diamond No. 24	..	3.75 lbs.	20
" No. 24 Special	..	3.00 lbs.	16½
" No. 26	..	2.66 lbs.	16½
" No. 26 Special	..	2.1 lbs.	14
Square Twist No. 27	..	2.75 lbs.	14½

INTERLOCKING PLATES. — The higher price and scarcity of sheets lead to the belief that there may be an advance this month. For interlocking steel plates, of 24 gage black steel f. o. b. mill central Ohio, the following prices are named:

Length.	Per 100 sq. ft. Weight.	Price, Flat.
Under 4 ft.	160 lbs.	$11.00
4 to 6 ft.	160 lbs.	10.00
6 to 8 ft.	160 lbs.	9.50
8 to 10 ft.	160 lbs.	9.00
10 ft.	160 lbs.	8.50

This material is made in regular widths of 18, 22, 26, 30, 34, 38, 42, 46, 50, 54 and 58 ins. Standard lengths of rolls are 150, 300 and 600 ft. Cutting to special length is charged extra.

EXPANDED METAL.—The demand is slow but the tonnage in sight, for delivery later in the year, is large. The prices given in the following table are for small quantities, delivered from warehouse, either New York or Pittsburg. For large lots concessions would be made.

Mesh, ins.	Gage (Stubs).	Section in sq. in. per ft. width.	Weight, in lbs., per sq. ft.	Size of Standard Sheets in ft.	Price per sq. ft. f. o. b. New York. Cts.
1½	18	.209	.74	8 × 3 or 6 ft.	5.5
¾	13	.225	.80	6 × 8 or 12 ft.	6.2
1½	12	.207	.70	4 × 8 or 12 ft.	5.5
2	12	.166	.56	5 × 8 or 12 ft.	4.8
3	16	.083	.28	6 × 8 or 12 ft.	2.4
3	10	.148	.50	5.25 × 8 or 12 ft.	2.6
3	10	.178	.60	6 × 8 or 12 ft.	2.8
3	10	.267	.90	4 × 8 or 12 ft.	3.8
3	10	.356	1.20	6 × 8 or 12 ft.	5.
3	6	.496	1.38	3.5 × 8 or 12 ft.	6.2
3	6	.600	2.07	4.66 × 8 or 12 ft.	8.3
4	16	.093	.42	4.5 × 8 or 9 ft.	2.8
6	4	.245	.84	5 × 8 or 12 ft.	3.7
6	4	.368	1.26	5 × 8 or 12 ft.	5.

METALS.

COPPER.—The buying of copper during January was small and prices have slowly melted away. As the month opened electrolytic was not offered at less than 13.87½ cts., but now it can be readily obtained at 13.62½ cts. Lake copper has likewise declined about ¼-ct. and is quoted at 13.75 cts. Casting is relatively lower at 13.37½ to 13.50 cts. The decline was not at all unexpected. The largest consumers bought heavily during November and December and this copper was to be shipped them in January, February and March. Some of this was obtained near the 13-ct. level and most of the orders were booked under 13.37½ cts., consequently these manufacturers are not in the market; although they make frequent inquiries and should a heavy decline ensue, would probably buy for distant periods. The fact that most of the copper now in the process of manufacture costs less money than to-day's prices accounts, in a measure, for the weakness in finished products such as brass, copper sheets and wire.

Consolidations of some low-grade copper mining companies have been made and it is expected that the larger companies operating in Silver Bow County, Mont., will find a way to pool their interest and thus do away with the vexing law of the "apex."

The statistical position is slightly improved for the exports during January were over 26,000 tons, an increase of fully 7,000 tons compared with the same month last year. Imports, however, are larger than ever before; an enormous amount of metal is coming in from South America.

ROOFING COPPER.—A falling off in the demand is noted, yet manufacturers have so many back orders on their books that they are not at all worried. The price is unchanged at 18 cts. base.

LEAD.—The rapid advances in December were not continued during the last month, but large deliveries have been made by the lead producers. Much of this metal was sold at 0.20 to 0.30 cts. below price ruling today and in consequence the market for leaf products is rather uncertain. The American Smelting & Refining Co. continues to quote shipment lead, in 50-ton lots, at 4.70 cts. Spot lead is slightly easier at 4.72½ cts., New York and 4.60 cts. St. Louis. Lead from store is approximately unchanged at 5.50 to 5.75 cts. per lb.

LEAD PIPE.—Considerable business has developed on the advance, but there is no scarcity of material. The price of 5.75 cts. is quoted to large consumers and jobbers and 6.40 cts. to small consumers.

SHEET LEAD.—A fair demand continues and the price is unchanged at 6.25 cts. to large consumers and jobbers and 6.75 cts. to plumbers.

LEAD WOOL.—The market is firm, but prices are unchanged from those of a month ago at 5½ cts.

PIG TIN.—The rapid and unwarranted advance in the price of tin during the month of November, which was caused by the operations of reckless French speculators, collapsed and fell off as much as they advanced and in as short a time. Apparently powerful interests are attempting to sustain the market in the face of highly unfavorable statistics. It is the belief of those especially well versed in the subject that prices will have to recede.

A scarcity of spot tin exists in New York sold because the U. S. Steel Corporation and its subsidiary companies have purchased all of the floating supplies. Stocks in this country, however, are large. The world's visible supplies are greater than at any time in the last ten years. Wholesale lots, 5-ton parcels, are quoted at 32.65 cts. net cash against delivery of documents New York. Small lots are approximately 34 cts.

MISCELLANEOUS METALS.—Small lots of metals and metal products can be obtained from jobbers' stores New York, at the following prices:

	Per lb.
Bismuth	$2.25
Brass tubes, iron pipe sizes:	
⅛-in.	.19
¼ to 3-in.	.18
3½-in.	.19
4-in.	.20
Brass sheets	.15¼
Brass rods	.15¼
Solder, ½ & ½ guaranteed	.22
Spelter, prime western	.07
Zinc sheets	.08½

OLD METALS.—Miscellaneous lots of scrap metal, amounting to about a ton, can be sold to dealers in New York at the following prices:

	Cts. per lb.
Copper heavy and wire	11.25@11.50
Copper, light and bottoms	10.25@10.50
Brass, heavy	8.00@ 8.25
Brass, light	6.50@ 6.75
Heavy machine composition	10.50@10.75
Clean brass turnings	7.50@ 7.75
Composition turnings	8.75@ 9.00
Lead, heavy	.... 3.75
Lead, tea	.... 3.50
Zinc scrap	.... 4.50

LUMBER.

Price changes in this market have been few and unimportant. Considerable mill building is in sight in New England and this will call for much material in the spring. The railroads curtailed their purchases of cross ties and poles during the last two years and now they will have to buy. The cross ties purchased by the railroads in 1908 were only 73% as many as the year previous. Prices in this line have steadily advanced.

The cutting of timber in Maine and New Brunswick has been retarded owing to the lack of snow in that quarter. Many operators had snow enough to work on before the thaw came, and while the conditions were far from ideal, there was enough snow to make the roads passable, and hauling to the landings was going on in fair shape.

The mills, however, have added to their stock as they expect a good trade later in the year.

LONG-LEAF YELLOW PINE.—Trade has been quiet. Some of the large contractors have been in the market for small sizes, but there has been no large trade. For delivery from yard, New York and vicinity for "Merchantable," under the 1905 rules of the Association prices are as follows:

Price per M. in Yard, New York.

Size.	Length 20 ft. base.	21 to 26 ft.	31 to 35 ft.
8 in. wide and under by 8 in. thick and under. 10 in. wide	$31	$32	$33	$34
10 in. thick and under 12 in. wide by	33	34	35	36
12 in. thick and under 14 in. wide by	36	37	38	39
14 in. thick and under 16 in. wide by	43	44	45	46
16 in. thick and under	45	46	47	48

For pieces longer than 35 ft. and less than 40 ft. add from $4 to $8 to base price.

NORTH CAROLINA PINE.—The prices given below are for the cheaper grades of this lumber. Prime material is about $15 per M. higher. For pieces 20 ft. long and less, in car lots New York, prices are as follows:

Size.		Size.	
2 × 4 in.	$18	2 × 10 in.	$21
2 × 6 in.	18	2 × 12 in.	22
2 × 8 in.	18		

Roofing boards, either ship lapped or tongue and grooved, are as follows:

Size.		Size.	
1 × 6 in.	$17	1 × 10 in.	$19
1 × 8 in.	18	1 × 12 in.	21

Boston prices for 6-in. roofing boards are $17.50 to $18.

SPRUCE.—The Canadian spruce which comes into this market, there is considerable, is all in short lengths of 10 to 12 ft. and sells at concessions of $2 to $3 below West Virginia material. The latter is obtainable, in car lots, New York, as follows:

Size.	*Length, 10 to 20 ft.
2 to 4 in. thick by 4 to 8 in. wide	$27.50 to $28.50
2 to 4 in. thick by 10 to 12 in. wide	29.00 to 30.00
Sizes.	Length, 12 to 16 ft.
1 × 6 to 1 × 10	$26.00 to $28.00

*For each additional ft. in length, over 20 ft., add $1 per M.

SPRUCE CULLS.—A correspondent in Utica, N. Y., sends the following quotations f. o. b. that point: For boards 12 and 14 ft. long, 6 in. wide, $22.75; 8-in. wide, $23.75; 10-in. wide, $25.25; 12-in. wide, $25.75. Extras for longer pieces are as follows: 16-ft., $0.50; 18-ft. $1.50; 20-ft., $2.50; 22-ft., $3.50.. 24-ft., $4.50; 26-ft., $6.50; 28-ft., $7.50; 30-ft., $8.50.

FLOORING.—The best grade and finest grain of long leaf yellow pine flooring is $39 to $42. Second grade is $36 to $38, and the cheapest grade of edge flooring, of this wood, is $29 to $31.

North Carolina pine flooring is $28 to $31. All of these prices are for yard delivery New York of 13/16 × 4-in.

FACTORY FLOORING.—Tongue and grooved factory flooring of North Carolina pine from 2 to 4 ins. thick and 5 to 9 ins. wide is sold at $19 per M. f. o. b. Norfolk, Va. On cars New York City it can be had for $23 per M.

OAK FLOORING.—The finest grades of red or white oak, quarter sawed flooring are $90 to $100 per M. in yard New York. Selected, quarter sawed flooring is $50 to $60; selected, plain sawed is $45 to $50, and very common oak is $30.

HEMLOCK.—Some talk is heard, among those interested, that prices of hemlock may advance. It is well to point out that some other woods will have to advance first as the other kinds of lumber are now usurping the old time trade of hemlock. This is particularly true when there is water competition, as most of the hemlock is shipped to all markets by rail. For carload lots and over, in the vicinity of New York, the following prices are quoted:

Prices per M. f. o. b. cars New York:

Size.	Length 10 ft.	12 ft.	14 ft.	16 ft.
2 × 4 in.	$23.00	$21.00	$21.00	$23.00
2 × 6 in. to 2 × 10 in.	21.00	21.00	21.00	18 to 20
3 × 4 in. to 12 × 12 in.	21.50	21.50	22.00	19 to 21
1 × 8 in.	....	18.00	18.00	18.00
1 × 10 in. & 1 × 12 in.	....	18.50	18.50	18.50

PILES.—The demand for piles is rather limited and, for New York delivery, prices are unchanged from last month as follows: 60 to 64 ft., $7; 65 to 69 ft., $8; 70 to 74 ft., $9.50; 75 to 79 ft., $11; 80 ft. and longer, $14.

In Norfolk the following prices are named for carload lots of yellow pine piles, in cts. per lin. ft.: 40 to 50 ft. long, 12-in. butt, 7 cts., 14-in. butt, 9 cts.; 50 to 60 ft. long, 12-in. butt, 8 cts., 14-in. butt, 9 cts.; 60 to 70 ft. long, 14-in. butt, 10 cts.

Creosoted piles with 8-in. butt are 16 cts. per lin. ft., 14-in. butt 26 cts., and 18-in. butt, 34 cts.

CROSS TIES.—Following an advance of 2 cts. last month yellow pine ties are again from 1 to 2 cts. higher. The following quotations are named for carload lots f. o. b. New York City:

	Cts. each.
7 × 9-in.—8 ft. 6 ins.	80 to 81
7 × 8-in.—8 ft. 6 ins.	78 to 79
7 × 9-in.—8 ft.	78 to 80
6 × 9-in.—8 ft.	74 to 76
6 × 8-in.—8 ft.	68 to 69

In Savannah the shorter lengths are sold at 50 to 53 cts.

POLES.—See Line Construction.

SHINGLES.—The following prices are quoted per M. for cypress shingles. New York City: No 1 Hearts, 6 × 18-in., $7.50; Primes, 6 × 18-in., $6.50; No. 1 Hearts, 6 × 20-in., $10; Primes, 6 × 20-in., $8. Pine shingles, 2X clear, 6 × 18-in., are $4 and 4X best are $5.25. White cedar can be had at $5 for 16-in.

LATH.—Prices are firmer and $3.75 New York is bottom.

GUM.—Red gum is $31 to $33 for first quality boards and $21 to $23 for common ones.

Sap gum, firsts and seconds, is $20 to $22 for boards less than 12 ins. wide. Common sap gum is $16 to $18.

HICKORY.—Prices are unchanged as follows: For prime pieces, 1 to 2 ins. thick, wider than 4 ins., $50 to $66; 2¼ to 4 ins. thick, wider than 4 ins., $72 to $80; No. 1 Common, 1 to 2 ins. thick, wider than 3 ins., $30 to $40; 2¼ to 4 ins. thick, wider than 3 ins. $45 to $55.

BLACK WALNUT.—Prime stuff 1 to 2 ins. thick and over 6 ins. wide, is held at $95 to $115; No. 1 common, 1 to 2 ins. thick and over 4 ins. wide, commands $52 to $65.

MAHOGANY.—Prices on mahogany are largely governed by individual preference for select pieces. The best grade of Mexican is $150; second grade, $100 to $110. Cuban is sold at $175.

CHERRY.—The best grade of material, 1 to 2 ins. thick and wider than 6 ins. sells at $90 to $100; No. 1 common, 1 to 2 ins. thick and wider than 4 ins., is sold at $45 to $55.

FREIGHT RATES.—In the following tables are given the prices per thousand, for wholesale lots f. o. b. Ohio River points. The carload freight rates, per 100 lbs., to the principal cities are as follows: Baltimore, 16 cts.; Boston, 21 cts.; Buffalo, 10 cts.; Cleveland, 10 cts.; Detroit, 10 cts.; Indianapolis, 7 cts.; New York City, 19 cts.; Philadelphia, 17 cts.; Pittsburg, 10 cts.; Syracuse, 14 cts.; Toledo, 9 cts.

YELLOW POPLAR, ROUGH.

Thickness.	Classification and width: Prime, 8-in. and over.	Common, 4-in. and over.
1-in.	$54 to $56	$33 to $36
1¼—2-in.	57 to 59	35 to 37
3-in.	62 to 65	.....
4-in.	62 to 67	.....

Poplar squares 3 × 3-in., 4 × 4-in., 5 × 5-in., 6 × 6-in. and 7 × 7-in., of good quality are $62 to $67; 8 × 8-in. and larger, when obtainable, are $72 to $77 per M.

WHITE OAK.

Thickness.	Classification and width: A 1, 6-in. and over.	Common, 3-in. and over.
1-in.	$45 to $47	$30 to $32
2—2½-in.	47 to 49	32 to 34

Cull boards are $18 to $21; plank, from $21 to $23.

CHESTNUT.

Thickness.	Classification and width: A 1, 6-in. and wider.	Sound Wormy, 3-in. and wider.
1-in.	$43 to $45	$17.50 to $19
1¼-in.	45 to 47	19.50 to 21
2-in.	46 to 48	20.50 to 22

WHITE ASH.

Thickness.	Classification and width: A 1, 5-in. and over.	Common, 3-in. and over.
1-in.	$44 to $48	$30 to $33
1½—2-in.	48 to 52	31 to 34
2½—3-in.	65 to 70	40 to 45
4-in.	70 to 75	40 to 45

Cull boards are $20 to $22 and planks, $24 to $26.

CREOSOTING.—For ordinary lumber impregnated with about 12 lbs. of oil per cu. ft. the cost is $18 to $20 per M.

Creosoted lumber in Mobile, Ala., ranges from $32 per M. for 6 × 8-in. to $40 for 16-in. stringers.

GLASS.

A new interest has come into the common glass trade known as the Imperial Window Glass Co. The prices of this interest and the American Window Glass Co. are practically the same. The discounts to the large trade for the territory east of the Allegheny are 90 and 10% for all sizes of single and double strength. The minimum for the states of Georgia and Florida is 90 and 5%. In the western territory the minimum discount is 90 and 15% from the jobber's list of Oct. 1, 1903.

SKYLIGHT GLASS.—Small lots, of either ribbed or rough skylight glass from store in New York, are sold at the following rates:

Thickness in ins.	Price per sq. ft.
1/8	7 cts.
9/16	10 cts.
¼	15 cts.

Wired glass, ¼-in. thick, is sold at 25 cts. per sq. ft.

VAULT LIGHTS.—Lenses for concrete vault light work are sold by the piece and are usually made from the mold of the contractor. A "bulls eye" 3 ins. in diameter is sold at 3 cts., in large lots.

PLATE GLASS.—Prices have advanced somewhat since last summer and are represented at the following discounts: For all single plates of less than 5 sq. ft. the discount is 75 and 10%, for plates containing from 5 to 10 sq. ft. the discount is 80 and 5% and for plates containing over 10 sq. ft. the discount is 85% from list.

Polished plate glass is regularly made in all widths from 6 to 10 ins., inclusive, and of all even inches in length from 6 to 120. Also all widths from 12 to 144 ins. advancing by even inches and in lengths from 12 to 208 ins. advancing by even inches. Odd and fractional parts of inches are charged at the price for the next highest even inch. The price given below is the net cost of the glass of the size given, boxing being charged extra.

NET PRICES OF POLISHED PLATE GLASS IN DOLLARS.

Length, feet.	Width, ft. 1.	1.5	2.	2.5	3.	3.5	4.	4.5	5	6.	7.	8.	9.	10.
1	0.29	0.43	0.58	0.71	1.01	1.18	1.35	1.52	1.69	2.75	3.20	3.50	4.10	4.60
1.5	0.43	0.63	1.01	1.27	1.52	2.40	2.75	3.00	3.45	4.15	5.10	5.85	6.60	7.30
2	0.56	1.01	1.35	1.69	2.75	3.20	3.65	4.10	4.60	5.85	6.80	7.80	8.60	9.80
2.5	0.71	1.27	1.69	2.85	3.45	4.00	4.60	5.50	6.10	7.30	8.50	9.80	11.50	12.80
3	1.01	1.18	2.75	3.45	4.15	5.10	5.85	6.60	7.30	8.80	10.80	12.10	13.80	15.30
3.5	1.18	2.40	3.20	4.00	5.10	6.00	6.80	7.90	8.60	10.40	12.50	14.30	16.00	17.90
4	1.35	2.75	3.65	4.60	5.85	6.80	7.80	8.70	9.75	12.20	14.30	16.40	18.30	20.50
4.5	1.52	3.00	4.10	5.50	6.60	7.90	8.70	10.40	11.50	13.80	16.00	18.50	20.75	23.00
5	1.69	3.45	4.60	6.10	7.30	8.60	9.75	11.50	12.80	15.30	17.90	20.50	23.00	27.00
6	2.75	4.15	5.85	7.30	8.80	10.40	12.20	13.80	15.30	18.30	21.50	26.00	29.00	32.50
7	3.20	5.10	6.80	8.50	10.80	12.50	14.30	16.00	17.90	21.50	26.40	30.50	34.00	38.00
8	3.50	5.85	7.80	9.80	12.10	14.30	16.40	18.50	20.50	26.00	30.50	34.50	38.80	43.00
9	4.10	6.60	8.60	10.50	13.80	16.00	18.30	20.75	23.00	29.00	34.00	38.80	44.00	48.50
10	4.60	7.30	9.80	12.80	15.30	17.90	20.50	23.00	27.00	32.50	38.00	43.00	48.50	60.00

PAVING MATERIALS.

GRANITE BLOCK.—Dealers in granite block are looking forward to the coming season with an unusual amount of interest. Much new work is coming out and the satisfaction which some of the granite block put down in the last two years is giving makes them hope that this year will show an increase over the last one, which was excellent. For delivery in New York Cape Ann granite, in the old style block, is $1.50 per sq. yd. Dressed block to lay with the joint not more than ¼-in. is $1.80 per sq. yd.

ASPHALTUM.—Business is practically at a standstill not only for paving but waterproofing work. Prices, however, continue firm. Refined Trinidad asphaltum is $25 per net ton and waterproofing asphaltum is $27 per net ton for the best grades. California grades are higher at $26 to $30 f. o. b. New York and $16 to $19 at point of shipment.

ROAD OILS.—Competition is particularly keen and some sellers are aggressively going after business. For 30% asphaltum oil 4 cts. per gal. f. o. b. New York is asked. Texico macadam asphalt, 90% to 95%, is 10 cts. per gal. in bulk f. o. b. New York or Philadelphia. A or X tarvia in barrels is 8¼ to 9¼ cts. per gal.; B grade, in barrels, is 7 to 8 cts. per gal.

PAVING BLOCKS, WOOD.—For long leaf yellow pine blocks having not less than 20 lbs. of oil per cu. ft. the following prices are asked per sq. yd. f. o. b. New York City: 3 ins. thick, $1.70; 3½ ins. thick, $1.60, and 4 ins. thick, $2.10. These prices may vary slightly according to the different specifications, but probably not more than 15 cts. per sq. yd.

VITRIFIED BRICK.—The price per M. varies according to the size, but in general both brick and block average 55 to 65 cts. per sq. yd. f. o. b. factory. Some makers are asking 48 to 60 cts. per sq. yd. About 38 to 46 blocks and 55 to 62 bricks are required per sq. yd.

At these prices brick and block would cost from $1 to $1.25 delivered in New York and New England States. In Ohio, Pennsylvania, Indiana and Illinois they would average from $0.75 to $1 delivered.

CLAY PRODUCTS.

PIPE TILE.—Not much new business is coming out and trade is not in as satisfactory a state as it might be, several of the plants having large stocks on hand.

Discounts from the "Eastern List" are, 83% up to 24-in.; 78% for 27 and 30-in.; 73% for 33 and 36-in. At these discounts the net prices per ft. for carload lots, f. o. b. factory, are as follows:

2 & 3-in.	$0.027	18-in.	$0.289
4-in.	.034	20-in.	.382
5-in.	.042	21-in.	.423
6-in.	.051	22-in.	.468
8-in.	.085	24-in.	.715
9-in.	.102	27-in.	.93
10-in.	.128	30-in.	1.21
12-in.	.17	33-in.	1.69
15-in.	.23	36-in.	1.89

HOLLOW TILE.—The following prices are quoted for hollow building tile f. o. b. factory Perth Amboy, N. J.:

	Price per block, in cts.
4 × 12 × 12 in.	5.25
6 × 12 × 12 in.	6.6
8 × 12 × 12 in.	8.9
10 × 12 × 12 in.	10.5
12 × 12 × 12 in.	12.1

Fireproofing partition blocks are sold at the following prices:

	Price per block, in cts.
2 × 12 × 12 in.	4.4
3 × 12 × 12 in.	4.4
4 × 12 × 12 in.	5
6 × 12 × 12 in.	6.6
8 × 12 × 12 in.	8.8

These prices are for orders of over carload lots. For quantities in excess of $1,000 worth of material, concessions will be made.

ROOFING TILE.—Prices are without change. The best grade of roofing tile in flat blocks for high grade roofs is sold at $20 per M. for run of kiln and $30 per M. for selected. Glazed blocks can be had at $15 to $16. These prices are for 6 × 9 blocks f. o. b. factory. It requires 258 blocks to lay 100 sq. ft. of roof surface and, in consequence, the price per 100 sq. ft. of roof surface would be $5.87 for the glazed blocks; $7.82 for the run of kiln, and $10.73 for the selected.

Vitrified tile unglazed, of the French or Spanish type, is sold at approximately $8.50 per 100 sq. ft. of roof surface f. o. b. factory. Glass tiles are sold at 60 cts. each. It requires 183 of these for 100 sq. ft. of roofing.

TILE, INTERIOR.—It is claimed that a very strong trade agreement dominates the making, selling and laying of tile and that it is difficult for those outside of the association to buy and lay tile.

In New York, glazed wall tile is put in place for 65 cts. per sq. ft. and floor tile at 50 cts.

DUCT TELEPHONE.—Prices are a little firmer than a month ago and the demand has improved. The general asking price is 4½ to 5 cts. per duct ft. for delivery in this city, but this can be shaded for a desirable order.

LINE CONSTRUCTION.

TELEGRAPH WIRE.—Quite an improvement is noted in the demand. Prices are unchanged, the inside one being for ordinary steel while the outside price is for extra best steel. The sizes are in Birmingham wire gage and the price in cts. per lb.: Nos. 6 to 9 is 4¾ cts.; Nos. 10 to 11, 3¼ to 4¼ cts.; No. 12, 3¼ to 4¾ cts.; No. 14, 3¾ to 5¼ cts. Actual freight is allowed from point of manufacture, Trenton, N. J., when it does not exceed 25 cts. per 100 lbs.

WIRE, COPPER TRANSMISSION.—The demand is not at all active and 15.25 cts. is the quotation for No. 8 wire and heavier, both bare and insulated, in carload lots New York City. Grooved trolley wire is held at an advance of 0.25 cts. per lb. over the base price. A more comprehensive statement of conditions in the copper market will be found in the review of that market under the heading "Metals."

ALUMINUM WIRE.—With copper as cheap as it is there is very little demand for aluminum wire. The price is unchanged at 31 cts. base.

INSULATORS.—Glass insulators in lots of more than 1,000 and less than 10,000 are sold at the following prices per 1,000: Double petticoat 20 os., $33; Western Union, $30.25; No. 2 cable, $53.90; No. 4 cable, $210; Muncie type, 7-in., $236.50; No. 3 triple petticoat, 4½-in., $80.75.

POLES.—White cedar poles f. o. b. Rex, Mich., freight rate to Chicago 12 cts., are quoted by the Backus-Judd Lumber & Cooperage Co., Minneapolis, Minn., as follows:

Length in feet.	Price each —Diameter at top— 5-in.	6-in.	7-in.
25	$0.60	$1.00	$1.45
30	....	1.50	3.50
35	....	3.75	4.75
40	....	4.75	7.00
45	....	7.25	9.50
50	....	10.00	12.00

Cedar poles shipped from the state of Washington are quoted by R. E. Dowie Pole Company, 432 New York Block, Seattle, Wash., as follows:

Length in ft.	Diameter at top.	Price each.
30	8-in.	$2.40
35	"	2.80
40	"	3.20
45	9-in.	4.50
50	"	5.00
55	"	5.50
60	"	6.00
65	"	9.75
70	"	10.50
75	"	11.25
80	"	12.00

Chestnut poles, f. o. b. Mechanicville, N. Y., are quoted by T. C. Luther of that place as follows:

Length in feet.	Price each. —Diameter at top— 5-in.	6-in.	7-in.
25	$2.00	$2.50	$2.75
30	2.50	2.75	3.25
35	2.75	3.25	4.00
40	3.25	4.00	5.50
45	4.00	5.50	7.50
50	5.50	7.50	9.50

FIR CROSS ARMS.—Prices are unchanged since the last report and are represented by the following quotations:

Size, 3½ × 4½ in.	Price per arm in cts. Pacific Coast.	Chicago.	New York.
3 ft., 2-pin	8	13½	15½
4 ft., 4-pin	11	18½	21
5 ft., 4-pin	16	26½	28½
6 ft., 4 and 6-pin	20½	31½	36
8 ft., 6 and 8-pin	28	43	48½
10 ft., 8, 10 and 12-pin.	37	55½	67½

POLE STEPS.—Galvanized pole steps, per 100, are quoted as follows: Size 9/16 × 9-in., $2.44; ⅝ × 9-in., $3; 9/16 × 9-in., $3.31.

MILL SUPPLIES.

SHAFTING.—Deliveries are slow but prices are unchanged. Cold drawn steel shafting is sold by the makers at 55% discount, in carload lots, and 50% discount in less than carload lots. The following prices, per ft., are based on less than carload lots: ¾-in., 4.15 cts.; 1-in., 7.30 cts.; 1¼-in., 11.50 cts.; 1½-in., 15 cts.; 1¾-in., 20.50 cts.; 2-in., 25.50 cts.; 2¼-in., 38.75 cts.; 2½-in., 41.75 cts.; 2¾-in., 50 cts.; 3-in., 60 cts.; 3½-in., 90 cts.; 4-in., $1.27½; 4½-in., $1.78; 5-in., $2.35; 5½-in., $3; 6-in., $3.85.

CHAIN BELTING.—Chain drives of the Morse type which are made in sizes from 1 HP. to 5,000 HP. at speeds from 3,000 to 100 r. p. m.

Prices are as follows: From 3 HP. to 10 HP., 30-in. centers complete, with two sprockets, $7 to $8 per HP.; from 10 HP to 25 HP., 36-in. centers complete, $5 to $6 per HP.; from 25 HP. to 100 HP., 60-in. centers complete, $4 to $5 per HP.; from 100 HP. to 500 HP., 72-in. centers complete, $3 to $4 per HP.

BELTING.—Further advances in the prices of leather belting have been made by manufacturers and rubber belting is likewise higher than a month ago. The increased prices are due to the greater cost of raw material in both instances. The revised discounts on rubber belting are as follows: Competition, 70 and 10%; standard, 60 and 10%; best grades, 50 and 10%.

The following discounts are named for both single and double leather belting, being unchanged from a month ago: Extra heavy, 55%; heavy, 60%; medium, 60 and 10%; light, 60, 10 and 10%; shoulder, 75%; standard, 70 and 10%.

The net prices of leather belting per ft., figured at the above discounts are given in the following table:

LEATHER BELTING, PRICE PER FT.

Width, ins.	Extra heavy.	Heavy.	Light.
1	$0.11	$0.096	$0.078
1½	.162	.144	.117
2	.215	.172	.156
2½	.27	.24	.195
3	.325	.288	.235
3½	.38	.337	.275
4	.435	.385	.31
5	.54	.48	.39
6	.65	.58	.465
7	.76	.675	.55
8	.87	.78	.62
9	.97	.86	.70
10	1.08	.96	.78
11	1.20	1.06	.85
12	1.30	1.15	.94
14	1.52	1.35	1.09
16	1.73	1.53	1.28
18	1.95	1.73	1.40
20	2.16	1.92	1.56
22	2.37	2.10	1.72
24	2.60	2.30	1.87
26	2.82	2.50	2.05
30	3.25	2.90	2.33
36	3.92	3.45	2.82
48	5.00	4.60	3.75

LUBRICATING OILS.—Prices are unchanged from the last report. The price varies according to the classification by manufacturers or jobbers. In many cases engine or cylinder oil is sold at a higher price, under a special or trade name, than the refined oils. In general, however, the following price prevails to large consumers of approved credit who buy in 5-bbl. lots or larger:

	Cts. per gal.
*Cylinder, light filtered	23 to 32
*Cylinder, dark	20 to 27
*Cylinder, steam refined	14 to 22
Neutral Oils, filtered:	
Stainless white, 32 to 34 gravity	28 to 29
Lemon, 33 to 34 gravity	17 to 19
Dark, 32 gravity	15 to 18
Crank case oil	15 to 17

*Prices vary according to test.

GRAPHITE LUBRICANTS.—The price of graphite lubricants varies according to the brand name. The prices, per pound, in barrel lots, to the small consumers are given as follows: Engine flake graphite, 12 cts.; oiled graphite, 20 cts.; car box grease, 8 cts.; gear grease, for electric cars, 4¼ cts.; cup grease, 15 cts; axle grease, 8½ cts.; automobile graphite grease, 16 cts.

Large consumers and jobbers can obtain considerable concession from these figures.

PACKING—Valve and stuffing box packing is sold at the following prices per pound: Asbestos wick and rope, 13 cts.; sheet rubber, 11 to 13 cts.; pure gum rubber, 40 to 45 cts.; red sheet, 40 to 50 cts.; Jenkin's "96" packing, 60 cts.

FIRE HOSE.—The standard grade of underwriter's cotton rubber-lined hose, 2½ ins. in diameter, warranted 350 lbs. pressure, is sold in 50-ft. lengths, complete with couplings, at 65 cts. per ft. Common hose, 2½ ins. in diameter, tested to 200 lbs. pressure, is 35 cts. per ft.

COTTON WASTE.—Standard cotton mill waste is practically unchanged from last month No. 1 clean white waste is 9 cts. and B. grade 8 cts. per lb. These figures are named for single bale lots in New York.

HIGH SPEED STEEL.—The selling of high speed tool steel is such an expensive proposition that it is difficult to give any accurate quotations.

The U. S. Government recently bought some special analysis steel at 37 cts. per lb., and the large railroads pay around 50 cts. per lb. for their materials.

The well-known brands are quoted at 65 cts. in small lots.

LIGHTERAGE LIMITS.—The free delivery of "Lighterage Limits" in New York City are as follows: In Manhattan, from a point opposite the Fort Lee ferry south along the Hudson River around the Battery and north along the East and Harlem rivers to the Jerome Ave. bridge at 155th St. In New Jersey, south from Fort Lee ferry to Bayonne City; points on the north and east shore of Staten Island between Bridge Creek (Arlington) and Clifton, both inclusive, and including Elm Park, Eristina and Shooters Island. In Brooklyn, from 69th St., Bay Ridge, north to Pot Cove, Astoria, Long Island City.

OILS AND PAINTS.

LINSEED OIL.—The remarkable advance in the price of linseed oil, which has been going on for the last six months continued during January and oil is now at higher figures than before in years. These high prices are caused by an abnormal increase in the cost of flaxseed, it having sold as high as $2.15 a bu. When it is recalled that linseed oil, early last year, sold at less than 50 cts. a gal. the present price of 77 to 78 cts. will be appreciated. There seems to be no substitute for oil on good work, and as the price of oil has not seriously affected the cost of painting the present high figures are likely to continue until a new crop of seed comes into the market. Boiled oil is usually at an advance of 1 ct. per gal. over raw.

SPIRITS TURPENTINE.—Prices have advanced steadily; perhaps in sympathy with linseed oil although there seems to be no reason for it. Spot turpentine is 63 to 64 cts. per gal. in New York, an advance of 9 cts. per gal. compared with last month. In Savannah, Ga., the price is 60 cts., and the same figure is quoted in Charleston, S. C.

PETROLEUM PRODUCTS.—Pennsylvania oil is 3 cts. per bbl. cheaper. The Standard Oil Company gives the price of crude oil in bbls. at the wells as follows: Pennsylvania, second sand, and Tiona, $1.40; Mercer black 90 cts.; Corning, 70 cts.; New Castle, 87 cts.; North Lima, 84 cts.; Indiana, 79 cts.; Illinois, 60 cts.; heavy, below 30 gravity, 52 cts. In the local market petroleum from tank wagon delivery is 8½ cts.; auto-naphtha and stove gasoline 13¾ cts.

Fuel oil in tank cars is quoted at 95 cts. to $1.05 per bbl. of 42 gals. at seaboard points.

PAINTS.—A continuation of the good demand observed all winter for white lead is evident. The sharp advances in the price of lead made by the trust in December found dealers bare of paints, and in consequence there has been a fair buying even at the advanced price.

The prices of white lead in oil, or dry, are as follows for lots of 500 lbs. and over: In 100, 250 and 500-lb. kegs, 7¼ cts. per lb.; in 25 and 50-lb. kegs, 7½ cts. per lb. Red lead and litharge in bbls., ½ bbls. and 100-lb. kegs is 7¼ cts. per lb.

Brown metallic is $16.50 to $22 per ton; red metallic can be had at $14 to $18 per ton. American Venetian red is sold, in ton lots, at 75 cts. to $1.50 per 100 lbs.; English at $1.15 to $1.60 per 100 lbs.

Graphite bridge paints with an asphaltum base are quoted at 65 cts. per gal. in car lots and 70 cts. per gal. in bbl. lots.

Graphite paints with a linseed oil base are much higher, especially considering the high cost of oil. The best grades are about 95 cts. to $1 per gal. in bbl. lots and 90 cts. in carload lots.

Hydrex preservative paint is sold at 75 cts. per gal. in bbl. lots New York.

MISCELLANEOUS.

PAPER.—The market is quiet. Hydrex waterproofing felt is quoted at $1.25 per 100 sq. ft. Deafening felt, 6 and 9 lbs. to the sq. ft. is $40 per net ton. Red rope roofing is $1.75 per roll of 250 sq. ft. for one ply. Tar paper, in rolls of 400 sq. ft., is $31 per ton in carload lots. Other prices are as follows:

Tarred Paper:	Per roll of 108 sq. ft.
Standard 2-ply, 40 lbs	$0.45
Extra heavy 2-ply, 45 lbs	.55
Standard 3-ply, 60 lbs	.65
Extra heavy 3-ply, 70 lbs	.75
Rozin Sized Sheathing:	**Per roll of 500 sq. ft.**
Light, 35 lbs	$0.38
Medium, 30 lbs	.45
Heavy, 40 lbs	.60

PITCH.—The best quality of roofing and waterproofing pitch is sold at $ to $15 per 100 tons, delivered New Yor

ROOFING CEMENT.—Prices unchanged and Texaco roofing cement quoted at $25 per ton.

OAKUM—Prices are unchanged from last month and for 50-lb. bales, New York, they are as follows: Best grade, 6¼ cts.; U. S. Navy, 5¾ cts.; plumbers spun oakum, 2½ cts.

ROPE.—Prices are unchanged from last month as follows: Pure Manilas of the highest grade, 8 to 8½ cts.; second grade, 7½ cts.; and the less desirable qualities 7¼ cts. per lb. Pure sisal commands 7½ cts.; second grade, 6 cts. per lb. Jute rope and larger is 5 to 5½ cts. per lb.

ROOFING SLATE.—The manufacturers of roofing slate advanced prices from 25 to 50 cts. per 100 sq. ft. on Jan. 1. The supply is rather limited. The following quotations are for carload lots, f. o. b. quarry of the sizes in most general use:

	Per 100 sq. ft.
Vermont, sea green	$4.00 to $4.50
Pennsylvania, Bangor ribbon	4.00 to 4.50
Maine, Brownsville No. 1	6.00 to 7.75
Maine, Brownsville No. 2	5.00 to 6.00
Red	10.50 to 12.25
Unfading green	4.50 to 5.00
Genuine Bangor	5.00 to 6.50

ASBESTOS PRODUCTS.—The price of asbestos building felt and sheathing in less than ton lots is 3¼ cts. per lb. for the light, weighing from 6 to 30 lbs. per 100 sq. ft.; 4 cts. per lb. is charged for the heavy, weighing from 45 to 56 lbs. per 100 sq. ft.

Mill board is made in standard sheets, 40 × 40 ins., and 42 × 44 ins. It varies in thickness from 1/32 to ⅛-in. and in weight from 2 to 27 lbs. per sheet. The net price in 100-lb. lots is 5 cts. per lb.

Transite, asbestos wood, used for fireproofing, ventilators and smoke jacks, comes in standard sheets, 36 × 48 ins., 42 × 48 ins., and 42 × 96 ins. The prices f. o. b. factory, Nassau, N. H., are as follows:

Thickness.	Weight.	Price.
1/8-inch	1 lb.	$0.08
3/16-inch	1½ lbs.	.12
1/4-inch	2 lbs.	.16
5/16-inch	2½ lbs.	.20
3/8-inch	3 lbs.	.24
7/16-inch	3½ lbs.	.28
1/2-inch	4 lbs.	.32
9/16-inch	4½ lbs.	.36
5/8-inch	5 lbs.	.40
3/4-inch	6 lbs.	.44
7/8-inch	7 lbs.	.48
1 inch	8 lbs.	.52
1¼ inches	10 lbs.	.56
1½ inches	12 lbs.	.64
1¾ inches	14 lbs.	.72
2 inches	16 lbs.	.80

WATERPROOFING.—The prices for carload lots, f. o. b. cars New York, are as follows: Hydrex waterproof felt, $1.25 per 100 sq. ft.; Hydrex compound "A," 26 cts. per gal; Hydrex compound "B," 18 cts. per gal.

Texaco waterproofing cement is $30 per ton, in car lots, f. o. b. cars New York or Philadelphia.

Asphaltum, for waterproofing, is sold at $25 to $27 per net ton.

VAULT LIGHTS.—See Glass.

EXPLOSIVES.—Dynamite, of the kind usually used by contractors, is approximately 11 to 13 cts. per lb. f. o. b. factory in ton lots. Blasting powder, classified as "soda" grade, is sold at $1.20 to $1.40 per keg or 25 lbs. in lots of 10,000 lbs. The following prices prevail on Trojan in carload lots, minimum 24,000 lbs., f. o. b. Pacific Coast points: No. 1, 13½ cts.; No. 2, 10½ cts.; No. 3, 10 cts. They have a disruptive force equivalent to 60%, 40% and 30% of nitro-glycerine.

Exploders, per hundred, are sold at the following prices: 4 ft., $3.60; 6 ft., $4.10; 8 ft., $4.60; 10 ft., $5.10; 12 ft., $5.60; 16 ft., $6.60; 20 ft., $7.50; 24 ft., $9.40; 30 ft., $12; 36 ft., $14.60.

Caps in lots of 10,000 are $7 to $8 per thousand.

Blasting machines for 10 holes are $12; 25 holes, $20; 50 holes, $40; 100 holes, $60.

TRADE PUBLICATIONS.

DREDGES.—Wetherill Bros. Machine Co., Chester, Pa. Paper; 6 × 9 ins.; pp. 32; illustrated.

The Wetherill Co. manufactures hydraulic dredges and clam-shell and orange-peel buckets. The above pamphlet is a list of the various types of machines which they have in stock or will manufacture.

ASPHALTIC ROAD SURFACING.—The American Asphaltum & Rubber Co., 600 Harvester Building, Chicago, Ill. Paper; 6 × 9 ins.; pp. 22; illustrated.

From specifications for "permanently waterproofing and binding macadam roadways" given in this pamphlet, we take the following extract as showing how the company proposes to use asphalt in road construction:

On the wearing surface, which must be perfectly dry, there shall then be applied the binding and waterproofing material known as "Pioneer" road asphalt produced by The American Asphaltum & Rubber Co., of Chicago, Ill. (or an asphalt equal thereto), conforming to the analysis given below, poured at a temperature between 300° F. and 325° F., and about 2 gals. of asphalt to the square yard shall be used. When the asphalt has been applied for a distance of about 25 ft., fine stone chips or screenings, free from dust, shall be spread thinly over the hot asphalt and immediately followed by rolling with a 10-ton roller. Two men with brushes or brooms should follow roller and sweep any loose screenings onto places where asphalt shows through, until the asphalt has taken up all the screenings it will hold. The portion of roadway thus finished any one day may be opened up to traffic the following morning. No asphalt should be applied when the weather is below 32° F.

Besides the specifications there are a few pages of text relating to the present demand for improved macadam. A number of handsome illustrations are given, showing roads which have been surfaced with "Pioneer" asphalt and stone screenings. A few testimonials are given. The company states that it owns mines in Utah containing large deposits of asphaltic lime rock and gilsonite; also, that besides supplying asphalt for road work, it manufactures and sells mineral rubber pipe coating and various asphaltic products for roofing, paving and other purposes.

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We should be pleased to give further information on this subject upon request to the "Classified Department."